

WHAT IS CLAIMED IS:

1. A device for determining a location of a visceral constriction in a body, the device comprising:

a catheter comprising a compressible element having a volume dependent on compression of the element;

a volume detector for detecting a change in volume of the compressible element; and

a position detector for detecting a position of the compressible element with respect to a reference position measured along a length of the catheter.

2. The device according to claim 1, wherein the compressible element comprises a balloon filled with a liquid or a gas.

3. The device according to claim 2, wherein an interior of the balloon is in fluid communication with an interior of the catheter, and wherein the device further comprises:

a container having a variable volume;

a measurement and read-out device for detecting a volume change in the container by measuring a physical value related to the volume change, and displaying or recording the physical value;

a first tube connecting the catheter to the container;

a second tube connecting the catheter to the measurement and read-out device;

and

a stopcock, wherein the stopcock can be placed in a first position or a second position, wherein when the stopcock is placed in the first position a connection between the balloon and the container is opened and a connection between the balloon and the measurement and read-out device is blocked, and wherein when the stopcock is placed in the second position a connection between the balloon and the measurement and read-out device is opened and a connection between the balloon and the container is blocked.

4. The device according to claim 3, wherein the container comprises a vessel equipped with a piston.

5. The device according to claim 3, wherein the container comprises a balloon.

6. The device according to claim 1, wherein the compressible element comprises a compressible material which is electrically conductive, and wherein an electrical resistance of the compressible material is dependent on a compression of the compressible material.

7. The device according to claim 6, wherein the device further comprises:

a first electrode and a second electrode, wherein the first electrode and the second electrode are attached to the element;

a first conductor in electrical connection to the first electrode; and

a second conductor in electrical connection to the second electrode;

wherein the measurement and read-out device is electrically connected to the first conductor and the second conductor is capable of measuring an electrical resistance between the first electrode and the second electrode, and is capable of displaying and/or recording the electrical resistance.

8. The device according to claim 6, wherein the element comprises an electrically conductive foam enveloped by a membrane.

9. The device according to claim 6, wherein the element comprises a capsule containing electrically conductive granules.

10. The device according to claim 1, wherein the element comprises a closed balloon, wherein the closed balloon comprises a first chamber and second chamber connected by a tube, wherein at least one of the first chamber and the second chamber comprises a transducer which is capable of detecting a liquid being pressed from the first chamber into the second chamber.

11. The device according to claim 10, the device further comprising:

a first electrode and a second electrode;

a first conductor in electrical connection to the first electrode; and

a second conductor in electrical connection to the second electrode;

wherein the measurement and read-out device is electrically connected to the first conductor and the second conductor is capable of measuring an electrical resistance between the first electrode and the second electrode, and is capable of displaying and/or recording the electrical resistance, wherein the balloon is attached to the catheter along a length of the catheter, wherein the balloon is filled with an

electrically conductive liquid, wherein the transducer is situated in the second chamber, wherein the transducer comprises a foam, wherein the transducer is equipped with the first electrode and the second electrode, such that in operation, when the catheter is inserted into the body, the first chamber is inserted firstly and the second chamber is inserted secondly.

12. The device according to claim 1, wherein the element comprises a first and a second end, the element comprising a balloon situated at the first end and a rigid hollow body situated at the second end, wherein the balloon and the rigid body are connected by a tube, wherein a gas is contained within the element, wherein the rigid hollow body further comprises a compressible body which is separated from the gas by a membrane such that the compressible body is capable of being compressed by gas which is pressed out of the balloon and into the rigid hollow body, and wherein the compressible body comprises a compressible material, wherein the compressible material is electrically conductive, and wherein an electrical resistance of the compressible material is dependent on a compression of the compressible material.

13. The device according to claim 12, wherein the compressible material is an electrically conductive foam.

14. The device according to claim 12, wherein the compressible material comprises a plurality of electrically conductive granules.

15. The device according to any one of claims 12, wherein the device comprises:  
a first electrode and a second electrode, wherein the first electrode and the second electrode are situated on the compressible body;

a first conductor in electrical connection to the first electrode; and

a second conductor in electrical connection to the second electrode;

wherein the measurement and read-out device is electrically connected to the first conductor and the second conductor is capable of measuring an electrical resistance between the first electrode and the second electrode, and is capable of displaying and/or recording the electrical resistance, such that in operation, when the catheter is inserted into the body, the balloon is inserted firstly, and the rigid hollow body is inserted secondly.

16. A method for determining the location of a visceral constriction, the method comprising:

inserting a device comprising a compressible element into a body until the compressible element has passed a visceral constriction;

defining a reference point for a distance over which the device is inserted into the body; and

pulling out the device while monitoring a volume change of the compressible element as a function of a distance the device has been pulled out of the body, wherein the distance the device has been pulled out of the body is measured with respect to the reference point, and wherein the volume change of the compressible element indicates when the compressible element has passed the visceral constriction, whereby the location of the visceral constriction is determined.